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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,504	06/28/2001	Junichi Sato	862.C2272	3215

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EXAMINER	
RAO, ANAND SHASHIKANT	
ART UNIT	**PAPER NUMBER**
2613	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/892,504	SATO, JUNICHI	
	Examiner	Art Unit	
	Andy S. Rao	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 February 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's arguments filed with respect to amended claims 1-38 on 2/17/05 have been fully considered but they are not persuasive.

2. The Applicant presents two arguments contending Examiner Haney's rejection of claims 1-2, 5-6, 9-10, 13-14, 21-22, 25-26, and 29-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Jain (US 6,144,375), and of claims 3-4, 7-8, 1 1-12, 15-20, 23-24, 27-28, and 31-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jain (US 6,144,375) in view of Chen (US 6,263,022), said rejections being set forth in the Office Action of 11/17/04. However, after a careful considerations of the arguments presented the Examiner must respectfully disagree for the reasons that follow and maintain the applicability of the Jain reference for the reasons that follow.

After summarizing the instant invention as recited in the claims (Amendment of 2/17/05: page 24, lines 10-19; page 25 through page 28), the Applicant argues that Jain fails to disclose "designating a partial region or an object by user selected points..." as in the claims (Amendment of 2/17/05: page 29, lines 4-17). The Examiner respectfully disagrees. It is noted that by object localization the user is allowed to specify the desired view by manipulation of a model space so as to not only view an object, but also desired perspective of the model space. This more accurately qualifies as the region definition as in the amended claims, because it could pertain to an object, such as the player, a perspective viewed by the object, or a user desired view (Jain: column 11, lines 40-60). Accordingly, the Examiner maintains that this limitation is met by the user defined designation of a desired model space.

In response to applicant's arguments against the references individually (Amendment of 2/17/05: page 29, lines 15-21), one cannot show nonobviousness by attacking Chen reference individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Chen through the combination with Jain addresses the "user defined..." limitation and thus does not need to provide it in of itself.

A detailed Office Action follows below.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-2, 5-6, 9-10, 13-14, 21-22, 25-26, and 29-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Jain (US 6,144,375).

As for claims 1-2, 25-26, and 29-30, Jain teaches of display means for displaying a moving image on the basis of the input image data (Jain: column 24, lines 37-44; Figure 7), designation means for designating a partial region defined by a user selected points (Jain: column 11, lines 40-54: user manipulation of a desired view of a model space is more than just "selecting" a player) in a display screen of said display means (Jain: column 30, lines 43-47: selection of a football player is considered a region), encoding means encoding the image data, wherein said display means displays a still image of the moving image during designation said by said designation means (Jain: column 30, lines 45- 47), said encoding means encodes the image data with an image included in the region designated by said designation means of the moving image displayed by said display means being decodable have higher image quality than an image of a non-designated region (Jain: figure 7-which shows two windows, 406 is a 2D model and 402 is the 3D equivalent. The user can auto track by selecting object/region as described previously in the 2D model window and see the results in the larger higher quality 3D model window; column 24, lines 56-67; column 25, lines 1-21).

As for claims 5 and 6, most of the limitations of the claims have been discussed in the above rejection of claims 1 and 2. Jain also teaches of display means simultaneously displays the moving image and the still image of the moving image during designation by said designation means (The user can auto track (by selecting an object/region as described previously) in the 2D

model and see a still picture (Jain: figure 9, element 501) representative of the object chosen in the query area (Jain: figure 7, element 420; column 24, lines 56-67; column 25, lines 1-21.)

As for claims 9 and 10, most of the limitations of the claims have been discussed in the above rejection of claims 1 and 2, and further includes saving the encoded data generated by said encoding means (Jain: column 19, lines 36-44).

As for claims 13 and 14, most of the limitations of the claims have been discussed in the above rejection of claims 1 and 2, and further teaches of image sensing means for generating the image data by sensing an image (Jain: column 16, lines 34-47).

As for claims 21 and 22, most of the limitations of the claims have been discussed in the above rejections of claims 1 and 2, further includes Jain teaching of saving encoded data (Jain: column 19, lines 36-44).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 3-4, 7-8, 1 1-12, 15-20, 23-24, 27-28, and 31-38 are rejected under 4. 35 U.S.C. 103(a) as being unpatentable over Jain (US 6,144,375) in view of Chen (US 6,263,022).

7. As for claims 3-4, 27-28, and 31-32, most of the limitations of the claims have been discussed in the above rejection of claims 1 and 2. Jain does not teach of the following limitations, however, Chen does: means for generating transform coefficients by computing

discrete wavelet transforms of the image data (Note: the DCT is used in the encoder, however, the use of the DWT would have been just as obvious as was disclosed by Chen (Chen: column 2, lines 16-30; column 5, lines 54-65), means for generating quantization indices by quantizing the transform coefficients (Chen: column 5, lines 54-67; column 6, Lines 1-40- the coefficients are contained in the base layer bitstream which is fed into the enhancement layer encoder which then quantizes the bitstream), means for generating encoded data by decomposing the quantization indices into bit planes, and executing arithmetic coding for the respective bit planes, said encoding means shifts up the quantization indices corresponding to an image included in the region designated by said designation means of the moving image displayed by said display means by a predetermined number of bits (Chen: column 6, lines 26-40). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the Chen encoder with Jain because Jain discloses that any "well-known video encoding and compression method" could be used also the Chen encoder allows for selectively enhancing parts or blocks of the signal which have been given a higher priority.

As for claims 7 and 8, most of the limitations of the claims have been discussed in the above rejection of claims 3 and 4. Jain also teaches of display means simultaneously displays the moving image and the still image of the moving image during designation by said designation means (The user can auto track (by selecting an object/region as described previously) in the 2D model and see a still picture (Jain: figure 9, element 501) representative of the object chosen in the query area (Jain: figure 7, element 420- shown in more detail in figure 9; column 24, lines 56-67; column 25, lines 1-21.)

As for claims 11 and 12, most of tie limitations of the claims have been discussed in the above rejection of claims 3 and 4, and further includes a teaching of saving the encoded data generated by said encoding means (Jain: column 19, lines 36-44).

As for claims 15 and 16, most of the limitations of the claims have been discussed in the above rejection of claims 3 and 4, and Jain also teaches of image sensing means for generating the image data by sensing an image (Jain: column 16, lines 34-47).

As for claims 17-20, most of the limitations of the claims have been discussed in the above rejections of claims 1-4 respectively. Although Jain does not explicitly teach of recording on a recording medium it is considered obvious to one of ordinary skill in the art that the data would be recorded on a recording medium, like a hard drive, because the Jain's invention is stated as running on a computer where the recording medium would be the hard drive. (Official Notice)

As for claims 23 and 24, most of the limitations of the claims have been discussed in the above rejections of claims 3 and 4, however, Jain also teaches of image sensing means for generating the image data by sensing an image (Jain: column 16, Lines 34-47).

As for claims 33-38, most of the limitations of the claims have been discussed in the above rejections of claims 1-4 and 11-12. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the invention decode the stored data (as mentioned in the rejection of claims 11 and 12) then encode the data with the object having higher image quality that the non-designated portion (Jain: Figure 7 shows Vo windows, 406 is a 2D model and 402 is the 3D equivalent. The user can auto track by selecting an object/region as described previously in the 2D model window and see the results in the larger 3D model higher quality

window: column 24, lines 56-67; column 25, lines 1-21), decoding means for decoding the data stored in the storage means is considered an obvious variation on the encoded (encoder and decoder are opposites which is well-known in the art), and then having the ability to re-encode the decoded image data (refer to above rejection of encoding the decoded image data). The intermediate step of storage and retrieval between the encoding and decoding is considered a well-known process in the art. (Official Notice).

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad S. Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andy S. Rao
Primary Examiner
Art Unit 2613

asr
June 24, 2005